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Subject to Legal Review for Clarity and Consistency

Draft ISI Annex

Jan 03

Tariff item (Singapore HS 1996)	Description of products	Tariff item US HS 1996 (US HS 2002)	Description of products	Tariff item (Singapore HS 2002)	Description of products
3818	Chemical elements doped for use in electronics, in form of discs, wafers or similar forms; chemical compounds doped for use in electronics	3818	Chemical elements doped for use in electronics, in form of discs, wafers or similar forms; chemical compounds doped for use in electronics	3818	Chemical elements doped for use in electronics, in form of discs, wafers or similar forms; chemical compounds doped for use in electronics
7017 ex 701710	Laboratory, hygienic or pharmaceutical glassware, whether or not graduated or calibrated: - Quartz reactor tubes and holders designed for insertion into diffusion and oxidation furnaces for production of semiconductor wafers	7017 7017.10.00 7020.00.00 (7017.10.30)	Laboratory, hygienic or pharmaceutical glassware, whether or not graduated or calibrated: - Quartz reactor tubes and holders designed for insertion into diffusion and oxidation furnaces for production of semiconductor wafers (- Quartz reactor tubes and holders designed for insertion into diffusion and oxidation furnaces for production of semiconductor wafers)	7017 7017.10.000	Laboratory, hygienic or pharmaceutical glassware, whether or not graduated or calibrated: - Of fused quartz or other fused silica
8419 ex 841989	Machinery, plant or laboratory equipment, whether or not electrically heated (excluding furnaces, ovens and other equipment of heading 8514), for the treatment of materials by a process involving a change of temperature such as heating, cooking, roasting, distilling, rectifying, sterilizing, pasteurizing, steaming, drying, evaporating, vaporizing, condensing or cooling, other than machinery or plant of a kind used for domestic purposes; instantaneous or storage water heaters, nonelectric; parts therefor: - - Chemical vapor deposition apparatus for semiconductor production	8419 8479.89.85	Machinery, plant or laboratory equipment, whether or not electrically heated (excluding furnaces, ovens and other equipment of heading 8514), for the treatment of materials by a process involving a change of temperature such as heating, cooking, roasting, distilling, rectifying, sterilizing, pasteurizing, steaming, drying, evaporating, vaporizing, condensing or cooling, other than machinery or plant of a kind used for domestic purposes; instantaneous or storage water heaters, nonelectric; parts therefor: - - Chemical vapor deposition apparatus for semiconductor production	8419 8419.89.000	Machinery, plant or laboratory equipment, whether or not electrically heated (excluding furnaces, ovens and other equipment of heading 8514), for the treatment of materials by a process involving a change of temperature such as heating, cooking, roasting, distilling, rectifying, sterilizing, pasteurizing, steaming, drying, evaporating, vaporizing, condensing or cooling, other than machinery or plant of a kind used for domestic purposes; instantaneous or storage water heaters, nonelectric; parts therefor: - - Other

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Tariff item (Singapore HS 1996)	Description of products	Tariff item US HS 1996 (US HS 2002)	Description of products	Tariff item (Singapore HS 2002)	Description of products
ex 841990	- - Parts of chemical vapor deposition apparatus for semiconductor production	(8419.89.60) 8479.90.95 (8419.90.50)	(- - Molten-salt-cooled acrylic acid reactors) - - Parts of chemical vapor deposition apparatus for semiconductor production (- - Other: Of molten-salt-cooled acrylic acid reactors; of medical, surgical or laboratory sterilizer)	8419.90.000	- - Parts
8421 ex 842119 ex 842191	Centrifuges, including centrifugal dryers; filtering or purifying machinery and apparatus, for liquids or gases; parts thereof: - - Spin dryers for semiconductor wafer processing - - Parts of spin dryers for semiconductor wafer processing	8421 8421.19.30 8421.91.20	Centrifuges, including centrifugal dryers; filtering or purifying machinery and apparatus, for liquids or gases; parts thereof: - - Spin dryers for semiconductor wafer processing - - Drying chambers for the clothes-dryers of subheading 8421.12 and other parts of clothes-dryers incorporating drying chambers.	8421 8421.19.100 8421.91.100	Centrifuges, including centrifugal dryers; filtering or purifying machinery and apparatus, for liquids or gases - - Spin dryers for semiconductor wafer processing - - Parts of spin dryers for semiconductor wafer processing
8424 ex 842489	Mechanical appliances (whether or not hand operated) for projecting, dispersing or spraying liquids or powders; fire extinguishers, whether or not charged; spray guns and similar appliances; steam or sand blasting machines and similar jet projecting machines; parts thereof: - - Deflash machines for cleaning and removing contaminants from the metal leads of semiconductor packages prior to the electroplating process	8424 8424.30.90 8424.89.90 8465.99.00 8479.89.85	Mechanical appliances (whether or not hand operated) for projecting, dispersing or spraying liquids or powders; fire extinguishers, whether or not charged; spray guns and similar appliances; steam or sand blasting machines and similar jet projecting machines; parts thereof: - - Deflash machines for cleaning and removing contaminants from the metal leads of semiconductor packages prior to the electroplating process	8424 8424.89.100	Mechanical appliances (whether or not hand operated) for projecting, dispersing or spraying liquids or powders; fire extinguishers, whether or not charged; spray guns and similar appliances; steam or sand blasting machines and similar jet projecting machines - - Deflash machines for cleaning and removing contaminants from the metal leads of semiconductor packages prior to the electroplating process

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Tariff item (Singapore HS 1996)	Description of products	Tariff item US HS 1996 (US HS 2002)	Description of products	Tariff item (Singapore HS 2002)	Description of products
ex 842489	- - Spraying appliances for etching, stripping or cleaning semiconductor wafers	(8424.89.50) 8424.89.30	(- - Spraying appliances for developing semiconductor wafers; spraying appliances for etching, developing, stripping or cleaning flat panel displays; deflash machines for cleaning and removing contaminants from the metal leads of semiconductor packages prior to the electroplating process(deflash by high pressure spray)) - - Spraying appliances for etching, stripping or cleaning semiconductor wafers	8424.89.200	- - Spraying appliances for etching, stripping or cleaning
ex 842490	- - Parts of spraying appliances for etching, stripping or cleaning semiconductor wafers	8424.90.90	- - Other	8424.90.100	- - Parts of spraying appliances for etching, stripping or cleaning semiconductor wafers
8456	Machine tools for working any material by removal of material, by laser or other light or photon beam, ultrasonic, electro-discharge, electro-chemical, electron-beam, ionic-beam or plasma arc processes:	8456	Machine tools for working any material by removal of material, by laser or other light or photon beam, ultrasonic, electro-discharge, electro-chemical, electron-beam, ionic-beam or plasma arc processes:	8456	Machine tools for working any material by removal of material, by laser or other light or photon beam, ultrasonic, electro-discharge, electro-chemical, electron-beam, ionic-beam or plasma arc processes:
ex 845610	- - Machines for working any material by removal of material, by laser or other light or photo-beam in the production of semi-conductor wafers	8456.10.50 (8456.10.60)	- - Lasercutters for cutting contacting tracks in semiconductor production by laser beam. (- - For the use in the production of semiconductor wafers; lasercutters for cutting contacting tracks in semiconductor production.)	8456.10.100	- - Operated by laser or other light or photo beam processes; in the production of semiconductor wafers.
ex 845691	- - Apparatus for stripping or cleaning semiconductor wafers	8456.99.50 (8456.99.70)	- - Apparatus for stripping or cleaning semiconductor wafers - - For stripping and cleaning semiconductor wafers)	8456.91.000	- - For drying etching patterns on semiconductor material

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Tariff item (Singapore HS 1996)	Description of products	Tariff item US HS 1996 (US HS 2002)	Description of products	Tariff item (Singapore HS 2002)	Description of products
845691	- Machines for dry-etching patterns on semiconductor materials	8456.91	- For drying etching patterns on semiconductor material	8456.91	
ex 845699	- - Parts of apparatus for stripping or cleaning semiconductor wafers	8466.93.15 8466.93.45 8466.93.60 8466.93.90 8466.20.90 8466.30.30 8466.30.50	- - Parts of apparatus for stripping or cleaning semiconductor wafers	8456.99.900	- - Other
		(8456.99.70)	(- - For stripping and cleaning semiconductor wafers)		
ex 845699	- - Focused ion beam milling machines to produce or repair masks and reticles for patterns on semiconductor devices	8456.99.10	- - Focused ion beam milling machines to produce or repair masks and reticles for patterns on semiconductor devices	8456.99.100	- - Focused ion beam milling machines to produce or repair masks and reticles for patterns on semiconductor devices
ex 845699	- - Lasercutters for cutting contacting tracks in semiconductor production by laser beam	8456.10.50	- - Lasercutters for cutting contacting tracks in semiconductor production by laser beam.	8456.99.900	- - Other
8464	Machine tools for working stone, ceramics, concrete, asbestos-cement or like mineral materials or for cold working glass:	8464	Machine tools for working stone, ceramics, concrete, asbestos-cement or like mineral materials or for cold working glass:	8464	Machine tools for working stone, ceramics, concrete, asbestos-cement or like mineral materials or for cold working glass:
ex 846410	- - Machines for sawing monocrystal semiconductor boules into slices, or wafers into chips	8464.10.00	- - Machines for sawing monocrystal semiconductor boules into slices, or wafers into chips.	8464.10.000	- - Sawing machines
		(8464.10.00)	(- - Machines designed to saw (slice) blank semiconductor wafers from crystal boules of semiconductor grade materials)		
ex 846420	- - Grinding or polishing machines for processing of semiconductor wafers	8464.20.10	- - For processing of semi-conductor wafers	8464.20.100	- - Grinding, polishing and lapping machines for processing of semiconductor wafers.

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Tariff item (Singapore HS 1996)	Description of products	Tariff item US HS 1996 (US HS 2002)	Description of products	Tariff item (Singapore HS 2002)	Description of products
ex 846490	- - Dicing machine for scribing or scoring semiconductor wafers	8464.10.00 8464.90.10 (8464.90.10)	- - Dicing machine for scribing or scoring semiconductor wafers (- - For scribing or scoring semiconductor wafers.)	8464.90.100	- - Dicing machines for scribing or scoring semiconductor wafers
8466	Parts and accessories suitable for use solely or principally with the machines of headings 8456 to 8465, including work or tool holders, self-opening dieheads, dividing heads and other special attachments for machine tools; tool holders for any type of tool for working in the hand:	8466	Parts and accessories suitable for use solely or principally with the machines of headings 8456 to 8465, including work or tool holders, self-opening dieheads, dividing heads and other special attachments for machine tools; tool holders for any type of tool for working in the hand:	8466	Parts and accessories suitable for use solely or principally with the machines of headings 8456 to 8465, including work or tool holders, self-opening dieheads, dividing heads and other special attachments for machine tools; tool holders for any type of tool for working in the hand:
ex 846691	- - Parts for machines for sawing monocrystal semiconductor boules into slices, or wafers into chips	8466.91.10 8466.91.50 8466.10.00 8466.20.90 8466.30.30 8466.30.50 (8466.91.50)	- - Parts for machines for sawing monocrystal semiconductor boules into slices, or wafers into chips (- - Other)	8466.91.900	- - Other
ex 846691	- - Parts of dicing machines for scribing or scoring semiconductor wafers	8466.91.10 8466.91.50 8466.10.00 8466.20.90 8466.30.30 8466.30.50 (8466.91.50)	- - Parts of dicing machines for scribing or scoring semiconductor wafers (- - Other)	8466.91.900	- - Other
ex 846691	- - Parts of grinding, polishing and lapping machines for processing of semiconductor wafers	8466.91.10 8466.91.50 8466.10.00 8466.20.90 8466.30.30 8466.30.50 (8466.91.50)	- - Parts of grinding, polishing and lapping machines for processing of semiconductor wafers (- - Other)	8466.91.100	- - Parts of grinding, polishing and lapping machines for processing of semiconductor wafers
ex 846693	- - Parts of focused ion beam milling	8466.91.50 8466.93.15	- - Other - - Parts of focused ion beam	8466.93.100	- - Parts of focused ion beam milling

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Tariff item (Singapore HS 1996)	Description of products	Tariff item US HS 1996 (US HS 2002)	Description of products	Tariff item (Singapore HS 2002)	Description of products
	machines to produce or repair masks and reticles for patterns on semiconductor devices.	8466.93.45 8466.93.60 8466.93.90 8466.10.00 8466.20.90 8466.30.30 8466.30.50	milling machines to produce or repair masks and reticles for patterns on semiconductor devices.		machines to produce or repair masks and reticles for patterns on semiconductor devices.
		(8466.93.47)	(- - Of machines of subheading 8456.10.60; of machines of subheading 8456.91; of machines 8456.99.10; of machines of subheading 8456.99.70)		
ex 846693	- - Parts of lasercutters for cutting contacting tracks in semiconductor production by laser beam	8466.93.15 8466.93.45 8466.93.60 8466.93.90 8466.10.00 8466.20.90 8466.30.30 8466.30.50	- - Parts of lasercutters for cutting contacting tracks in semiconductor production by laser beam	8466.93.900	- - Other
		(8466.93.47)	(- - Of machines of subheading 8456.10.60; of machines of subheading 8456.91; of machines 8456.99.10; of machines of subheading 8456.99.70)		
ex 846693	- - Parts of machines for working any material by removal of material, by laser or other light or photo beam in the production of semiconductor wafers	8466.93.15 8466.93.45 8466.93.60 8466.93.90 8466.10.00 8466.20.90 8466.30.30 8466.30.50	- - Parts of machines for working any material by removal of material, by laser or other light or photo beam in the production of semiconductor wafers	8466.93.200	- - Parts of machines for working any material by removal of material, by laser or other light or photo beam in the production of semiconductor wafers
		(8466.93.47)	(- - Of machines of subheading 8456.10.60; of machines of subheading 8456.91; of machines 8456.99.10; of machines of		

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Tariff item (Singapore HS 1996)	Description of products	Tariff item US HS 1996 (US HS 2002)	Description of products	Tariff item (Singapore HS 2002)	Description of products
ex 846693	- - Parts of machines for dry etching patterns on semiconductor wafers	8466.93.15 8466.93.45 8466.93.60 8466.93.90 8466.20.90 8466.30.30 8466.30.50 (8466.93.47)	subheading 8456.99.70) - - - - Parts of machines for dry etching patterns on semiconductor materials (- - Of machines of subheading 8456.10.60; of machines of subheading 8456.91; of machines 8456.99.10; of machines of subheading 8456.99.70)	8466.93.300	- - Parts of machines for dry etching patterns on semiconductor wafers
8469 846911	Typewriters other than printers of heading 8471; word processing machines; Automatic typewriters and word processing machines - Word processing machines	8469 8469.11	Typewriters other than printers of heading 8471; word processing machines - Word processing machines	8469 8469.11	Typewriters other than printers of heading 8471; word processing machines - Word processing machines
8470	Calculating machines and pocket-size data recording, reproducing and displaying machines with calculating functions; accounting machines, postage-franking machines, ticket-issuing machines and similar machines, incorporating a calculating device; cash registers;	8470	Calculating machines and pocket-size data recording, reproducing and displaying machines with calculating functions; accounting machines, postage-franking machines, ticket- issuing machines and similar machines, incorporating a calculating device; cash registers;	8470	Calculating machines and pocket-size data recording, reproducing and displaying machines with calculating functions; accounting machines, postage-franking machines, ticket-issuing machines and similar machines, incorporating a calculating device; cash registers;

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8471	Automatic data processing machines and units thereof; magnetic or optical readers, machines for transcribing data onto data media in coded form and machines for processing such data, not elsewhere specified or included:	8471.10.00 8471.30.00 8471.41.00 8471.49.10 8471.50.40 8471.50.80	Computers: automatic data processing machines capable of 1) storing the processing program or programs and at least the data immediately necessary for the execution of the program; 2) being freely programmed in accordance with the requirements of the user; 3) performing arithmetical computations specified by the user; and 4) executing, without human intervention, a processing program which requires them to modify their execution, by logical decision during the processing run. The agreement covers such as automatic data processing machines whether or not they are able to receive and process with the assistance of central processing unit telephony signals, television signals, or other analogue or digitally processed audio or video signals. Machines performing a specific function other than data processing, or incorporating or working in conjunction with an automatic data processing machine, and not otherwise specified under Attachment A or B, are not covered by this agreement.	8471	Automatic data processing machines and units thereof; magnetic or optical readers, machines for transcribing data onto data media in coded form and machines for processing such data, not elsewhere specified or included:
		(8471)	(Automatic data processing machines and units thereof; magnetic or optical readers, machines for transcribing data onto data media in coded form and machines for processing such data, not elsewhere specified or included©)		
8472	Other office machines (for example, hectograph or stencil duplicating machines, addressing machines, automatic banknote dispensers, coin-sorting machines, coin-counting or wrapping machines, pencil-sharpening machines, perforating or stapling machines):	8472	Other office machines (for example, hectograph or stencil duplicating machines, addressing machines, automatic banknote dispensers, coin-sorting machines, coin-counting or wrapping machines, pencil-sharpening machines, perforating or stapling machines):	8472	Other office machines (for example, hectograph or stencil duplicating machines, addressing machines, automatic banknote dispensers, coin-sorting machines, coin-counting or wrapping machines, pencil-sharpening machines, perforating or stapling machines)
ex 847290	- - Automatic teller machines	8472.90.10	- - Automatic teller machines	8472.90.100	- - Automatic teller machines

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Tariff item (Singapore HS 1996)	Description of products	Tariff item US HS 1996 (US HS 2002)	Description of products	Tariff item (Singapore HS 2002)	Description of products
8473	Parts and accessories (other than covers, carrying cases and the like) suitable for use solely or principally with machines of headings 8469 to 8472:	8473	Parts and accessories (other than covers, carrying cases and the like) suitable for use solely or principally with machines of headings 8469 to 8472:	8473	Parts and accessories (other than covers, carrying cases and the like) suitable for use solely or principally with machines of headings 8469 to 8472:
847321	- Parts and accessories of the machines of heading No 8470 of the electronic calculating machines of subheading 8470 10, 8470 21 or 8470 29	8473.21	- Parts and accessories of the machines of heading No 8470 of the electronic calculating machines of subheading 8470 10, 8470 21 or 8470 29	8473.21	- Parts and accessories of the machines of heading No 8470 of the electronic calculating machines of subheading 8470 10, 8470 21 or 8470 29
847329	- Parts and accessories of the machines of heading No 8470 other than electronic calculating machines of subheading 8470 10, 8470 21 and 8470 29	8473.29	- Other	8473.29	- Other
847330	- Parts and accessories of the machines of heading No 8471	8473.30	- Parts and accessories of the machines of heading No 8471	8473.30	- Parts and accessories of the machines of heading No 8471
847350	- Parts and accessories equally suitable for use with machines of two or more of the heading Nos. 8469 to 8472	8473.50	- Parts and accessories equally suitable for use with machines of two or more of the heading Nos. 8469 to 8472	8473.50	- Parts and accessories equally suitable for use with machines of two or more of the heading Nos. 8469 to 8472
8477	Machinery for working rubber or plastics or for the manufacture of products from these materials, not specified or included elsewhere in this chapter; parts thereof:	8477	Machinery for working rubber or plastics or for the manufacture of products from these materials, not specified or included elsewhere in this chapter; parts thereof:	8477	Machinery for working rubber or plastics or for the manufacture of products from these materials, not specified or included elsewhere in this chapter
ex 847710	- - Injection-molding machines for encapsulation in the assembly of semiconductors	8477.10.70	- - Injection-molding machines for encapsulation in the assembly of semiconductors	8477.10.100	- - Injection moulding machines: For the rubber industry
				8477.10.200	- - Injection moulding machines: For the plastic material industry
ex 847790	- - Parts of encapsulation equipment	8477.90.20 8477.90.40 8477.90.60 8477.90.80	- - Parts of encapsulation equipment	8477.90.000	- - Parts
		(8477.90.15)	(- - Parts: Base, bed, platen, clamp,		

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		8477.90.35	cylinder, ram and injection castings, weldments and fabrications: of machines of subheading 8477.10.70, 8477.40.40 or 8477.59.40.) - - Parts: Base, bed, platen, clamp, cylinder, ram and injection castings, weldments and fabrications: barrel screw: of machines of subheading 8477.10.70, 8477.40.40 or 8477.59.40.		
		8477.90.55	- - Parts: Base, bed, platen, clamp, cylinder, ram and injection castings, weldments and fabrications: hydraulic assemblies incorporating more than one of the following: manifold; valves; pump oil; oil cooler: of machines of subheading 8477.10.70, 8477.40.40 or 8477.59.40.		
		8477.90.75	- - Parts: Base, bed, platen, clamp, cylinder, ram and injection castings, weldments and fabrications: Other: of machines of subheading 8477.10.70, 8477.40.40 or 8477.59.40.		
8479	Machines and mechanical appliances having individual functions, not specified or included elsewhere in this chapter; parts thereof:	8479	Machines and mechanical appliances having individual functions, not specified or included elsewhere in this chapter; parts thereof:	8479	Machines and mechanical appliances having individual functions, not specified or included elsewhere in this chapter
ex 847950	- - Industrial robots, not elsewhere specified or included	8479.50.00	- - Industrial robots, not elsewhere specified or included (2.5%)	8479.50.000	- - Industrial robots, not elsewhere specified or included
ex 847989	- - Apparatus designed to grow monocrystal semiconductor boules (crystal growers and pullers).	8479.89.84	- - Other : Other	8479.89.100	- - Apparatus for growing or pulling monocrystal semiconductor boules.

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Tariff item (Singapore HS 1996)	Description of products	Tariff item US HS 1996 (US HS 2002)	Description of products	Tariff item (Singapore HS 2002)	Description of products
ex 847989	- - Apparatus for physical deposition by sputtering on semiconductor wafers	8479.89.85 (8479.89.84)	- - Apparatus for physical deposition by sputtering on semiconductor wafers (- - Other : Other)	8479.89.900	- - Other
ex 847989	- - Apparatus for wet-etching, developing, stripping or cleaning semi-conductor wafers and flat panel displays.	8424.89.30 8464.90.10 8464.90.50 8479.89.85 8424.89.90 8479.89.95 (8479.89.87)	- - Apparatus for wet-etching, developing, stripping or cleaning semi-conductor wafers and flat panel displays. (- - Other :Machines for wet cleaning flat panel displays)	8479.89.900	- - Other
ex 847989	- - Die attach apparatus, tape automated bonders, and wire bonders for assembly of semiconductors	8515.80.00 8479.89.85 (8479.89.84)	- - Die attach apparatus, tape automated bonders, and wire bonders for assembly of semiconductors (- - Other : Other)	8479.89.900	- - Other
ex 847989	- - Encapsulation equipment for assembly of semiconductors	8477.10.80 8477.40.00 8477.59.00 (8479.89.84)	- - Encapsulation equipment for assembly of semiconductors (- - Other : Other)	8479.89.900	- - Other
ex 847989	- - Epitaxial deposition machines for semiconductor wafers	8479.89.84	- - Other : Other	8479.89.200	- - Expitaxial deposition machines for semiconductor wafers.
ex 847989	- - Machines for bending, folding and straightening semiconductor leads	8462.21.00 8462.29.00 (8479.89.84)	- - Machines for bending, folding and straightening semiconductor leads (- - Other : Other)	8479.89.900	- - Other
ex 847989	- - Physical deposition apparatus for semiconductor production	8479.89.85 (8479.89.84)	- - Physical deposition apparatus for semiconductor production. (- - Other : Other)	8479.89.900	- - Other

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ex 847989	- - Machines (spinners) designed to coat photographic emulsions on semiconductor wafers	8479.89.85	- - Spinners for coating photographic emulsions on semiconductor wafers	8479.89.900	- - Other
		(8479.89.84)	(- - Other : Other)		
ex 847990	- - Parts of apparatus for physical deposition by sputtering on semiconductor wafers	8479.90.95	- - Parts of apparatus for physical deposition by sputtering on semiconductor wafers	8479.90.900	- - Other
		(8479.90.94)	(- - Parts : Others)		
ex 847990	- - Parts for die attach apparatus, tape automated bonders, and wire bonders for assembly of semiconductors	8515.90.20 8479.90.95	- - Parts for die attach apparatus, tape automated bonders, and wire bonders for assembly of semiconductors	8479.90.900	- - Other
		(8479.90.94)	(- - Parts: Others)		
ex 847990	- - Parts for spinners for coating photographic emulsions on semiconductor wafers	8479.90.95	- - Parts for spinners for coating photographic emulsions on semiconductor wafers	8479.90.900	- - Other
		(8479.90.94)	(- - Parts: Others)		
ex 847990	- - Parts of apparatus for growing or pulling monocrystal semiconductor boules	8479.90.94	- - Parts: Others	8479.90.100	- - Parts: of apparatus for growing or pulling monocrystal semiconductor boules
ex 847990	- - Parts of apparatus for wet etching, developing, stripping or cleaning semiconductor wafers and flat panel displays	8424.90.90 8466.91.10 8466.91.50 8479.90.95 8466.20.90 8466.30.30 8466.30.50	- - Parts of apparatus for wet etching, developing, stripping or cleaning semiconductor wafers and flat panel displays	8479.90.900	- - Other
		(8479.90.94)	(- - Parts: Others)		
ex 847990	- - Parts of automated machines for	8431.39.00	- - Parts of automated machines	8479.90.900	- - Other

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ex 847990	transport, handling and storage of semiconductor wafers, wafer cassettes, wafer boxes and other material for semiconductor devices - - Parts of encapsulation equipment for assembly of semiconductors	(8479.90.94) 8477.90.20 8477.90.40 8477.90.60 8477.90.80	for transport, handling and storage of semiconductor wafers, wafer cassettes, wafer boxes and other material for semiconductor devices (- - Parts: Others) - - Parts of encapsulation equipment for assembly of semiconductors	8479.90.900	- - Other
ex 847990	- - Parts of epitaxial deposition machines for semiconductor wafers	(8479.90.94) 8479.90.94	(- - Parts: Others) - - Parts: Others	8479.90.200	- - Parts of epitaxial deposition machines for semiconductor wafers
ex 847990	- - Parts of machines for bending, folding and straightening semiconductor leads	8466.94.20 8466.94.40 8466.94.60 8466.94.80 8466.10.00 8466.20.90 8466.30.30 8466.30.50	- - Parts of machines for bending, folding and straightening semiconductor leads	8479.90.900	- - Other
ex 847990	- - Parts of physical deposition apparatus for semiconductor production	(8479.90.94) 8479.90.95	(- - Parts: Others) - - Parts of physical deposition apparatus for semiconductor production	8479.90.900	- - Other
8480	Molding boxes for metal foundry; mold bases; molding patterns; molds for metal (other than ingot molds), metal carbides, glass, mineral materials, rubber or plastics:	8480	Molding boxes for metal foundry; mold bases; molding patterns; molds for metal (other than ingot molds), metal carbides, glass, mineral materials, rubber or plastics:	8480	Molding boxes for metal foundry; mold bases; molding patterns; molds for metal (other than ingot molds), metal carbides, glass, mineral materials, rubber or plastics:
ex 848071	- - Injection and compression molds for the manufacture of	8480.71.40	- - Injection or compression types for the manufacture of semiconductor	8480.71.100	- - Injection or compression types: For manufacture of semiconductor devices.

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	semiconductor devices		devices.		
8504	Electrical transformers, static converters (for example, rectifiers) and inductors; parts thereof:	8504	Electrical transformers, static converters (for example, rectifiers) and inductors; parts thereof:	8504	Electrical transformers, static converters (for example, rectifiers) and inductors; parts thereof:
ex 850440	- - Static converters for automatic data processing machines and units thereof, and telecommunication apparatus	8504.40.60	- - Static converters for suitable for physical incorporation into automatic data processing machines or units thereof of heading 8471	8504.40.100	- - Static converters for automatic data processing machines and units thereof, and telecommunication apparatus
ex 850450	- - Other inductors for power supplies for automatic data processing machines and units thereof, and telecommunication apparatus	8504.50.40	- - Other inductors for power supplies for automatic data processing machines and units thereof of heading 8471, for telecommunication apparatus	8504.50.100	- - Other inductors for power supplies for automatic data processing machines and units thereof, and telecommunication apparatus
8514	Industrial or laboratory electric furnaces and ovens (including those functioning by induction or dielectric loss); other industrial or laboratory equipment for the heat treatment of materials by induction or dielectric loss; parts thereof:	8514	Industrial or laboratory electric furnaces and ovens (including those functioning by induction or dielectric loss); other industrial or laboratory equipment for the heat treatment of materials by induction or dielectric loss; parts thereof:	8514	Industrial or laboratory electric furnaces and ovens (including those functioning by induction or dielectric loss); other industrial or laboratory equipment for the heat treatment of materials by induction or dielectric loss
ex 851410	- - Resistance heated furnaces and ovens for the manufacture of semi-conductor devices on semi-conductor wafers.	8514.10.00	- - Resistance heated furnaces and ovens	8514.10.100	- - Resistance heated furnaces and ovens for the manufacture of semiconductor devices on semiconductor wafers.
ex 851420	- - Inductance or dielectric furnaces and ovens for the manufacture of semi-conductor devices on semi-conductor wafers.	8514.20.80	- Other	8514.20.100	- - Inductance or dielectric furnaces and ovens for the manufacture of semiconductor devices on semiconductors wafers.
ex 851430	- - Apparatus for rapid heating of semiconductor wafers	8514.30.40 (8514.30.60)	- - Apparatus for rapid heating of semiconductor wafers (- - Apparatus for rapid heating of semiconductor wafers)	8514.30.000	- - Other furnaces and ovens
ex 851430	- - Parts of resistance heated furnaces	8514.30.20	- - Other furnaces and ovens: for	8514.90.100	- - Parts of resistance heated furnaces

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Tariff item (Singapore HS 1996)	Description of products	Tariff item US HS 1996 (US HS 2002)	Description of products	Tariff item (Singapore HS 2002)	Description of products
ex 851490	and ovens for the manufacture of semiconductor devices on semiconductor wafers - - Parts of apparatus for rapid heating of wafers	8514.90.00 (8514.90.80)	diffusion, oxidation or annealing of semiconductor wafer. - - Parts of apparatus for rapid heating of wafers (- - Other)	8514.90.900	and ovens for the manufacture of semiconductor devices on semiconductor wafers - - Other
ex 851490	- - Parts of furnaces ovens of heading no. 8514 10 to no. 8514 30	8514.90.80	- - Other	8514.90.900	- - Other
8517	Electrical apparatus for line telephony or line telegraphy, including line telephone sets with cordless handsets and telecommunication apparatus for carrier-current line systems or for digital line systems; videophones; parts thereof:	8517	Electrical apparatus for line telephony or line telegraphy, including line telephone sets with cordless handsets and telecommunication apparatus for carrier-current line systems or for digital line systems; videophones; parts thereof:	8517	Electrical apparatus for line telephony or line telegraphy, including line telephone sets with cordless handsets and telecommunication apparatus for carrier-current line systems or for digital line systems; videophones
8518	Microphones and stands therefor; loudspeakers, whether or not mounted in their enclosures; headphones and earphones, whether or not combined with a microphone, and sets consisting of a microphone and one or more loudspeakers; audio-frequency electric amplifiers; electric sound amplifier sets; parts thereof:	8518	Microphones and stands therefor; loudspeakers, whether or not mounted in their enclosures; headphones and earphones, whether or not combined with a microphone, and sets consisting of a microphone and one or more loudspeakers; audio-frequency electric amplifiers; electric sound amplifier sets; parts thereof:	8518	Microphones and stands therefor; loudspeakers, whether or not mounted in their enclosures; headphones and earphones, whether or not combined with a microphone, and sets consisting of a microphone and one or more loudspeakers; audio-frequency electric amplifiers; electric sound amplifier sets
ex 851810	- - Microphones having a frequency range of 300 Hz to 3.4 KHz with a diameter of not exceeding 10 mm and a height not exceeding 3 mm, for telecommunication use	8518.10.40	- - Microphones having a frequency range of 300 Hz to 3.4 KHz with a diameter of not exceeding 10 mm and a height not exceeding 3 mm, for telecommunication use	8518.10.100	- - Microphones having a frequency range of 300 Hz to 3.4 KHz with a diameter of not exceeding 10 mm and a height not exceeding 3 mm, for telecommunication use
ex 851829	- - Loudspeakers, without housing, having a frequency range of 300 Hz to 3.4 KHz with a diameter of not exceeding 50 mm, for telecommunication use	8518.29.40	- - Other: Without housing, having a frequency range of 300Hz to 3.4 kHz with a diameter of not exceeding 50 mm, for telecommunication use.	8518.29.100	- - Loudspeakers, without housing, having a frequency range of 300 Hz to 3.4 KHz with a diameter of not exceeding 50 mm, for telecommunication use
ex 851830	- - Line telephone handsets	8518.30.10	- - Line telephone handsets	8518.30.100	- - Line telephone handsets

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Tariff item (Singapore HS 1996)	Description of products	Tariff item US HS 1996 (US HS 2002)	Description of products	Tariff item (Singapore HS 2002)	Description of products
8520	Magnetic tape recorders and other sound recording apparatus, whether or not incorporating a sound reproducing device:	8520	Magnetic tape recorders and other sound recording apparatus, whether or not incorporating a sound reproducing device	8520	Magnetic tape recorders and other sound recording apparatus, whether or not incorporating a sound reproducing device
852020	- Telephone answering machines	8520.20	- Telephone answering machines	8520.20	- Telephone answering machines
8523	Prepared unrecorded media for sound recording or similar recording of other phenomena, other than products of chapter 37:	8523	Prepared unrecorded media for sound recording or similar recording of other phenomena, other than products of chapter 37:	8523	Prepared unrecorded media for sound recording or similar recording of other phenomena, other than products of chapter 37
852311	- Magnetic tapes of a width not exceeding 4 mm	8523.11	- Magnetic tapes of a width not exceeding 4 mm	8523.11	- Magnetic tapes of a width not exceeding 4 mm
852312	- Magnetic tapes of a width exceeding 4 mm but not exceeding 6.5 mm	8523.12	- Magnetic tapes of a width exceeding 4 mm but not exceeding 6.5 mm	8523.12	- Magnetic tapes of a width exceeding 4 mm but not exceeding 6.5 mm
852313	- Magnetic tapes of a width exceeding 6.5 mm	8523.13	- Magnetic tapes of a width exceeding 6.5 mm	8523.13	- Magnetic tapes of a width exceeding 6.5 mm
852320	- Magnetic discs	8523.20	- Magnetic discs	8523.20	- Magnetic discs
852390	- Other	8523.90	- Other	8523.90	- Other
8524	Records, tapes and other recorded media for sound or other similarly recorded phenomena, including matrices and masters for the production of records, but excluding products of chapter 37:	8524	Records, tapes and other recorded media for sound or other similarly recorded phenomena, including matrices and masters for the production of records, but excluding products of chapter 37:	8524	Records, tapes and other recorded media for sound or other similarly recorded phenomena, including matrices and masters for the production of records, but excluding products of chapter 37
852431	- Disc for laser reading systems for reproducing phenomena other than sound or image.	8524.31	- Disc for laser reading systems for reproducing phenomena other than sound or image.	8524.31	- Disc for laser reading systems for reproducing phenomena other than sound or image
ex 852439	- - Other: For reproducing representations of instructions, data, sound, and image, recorded in a machine readable binary form, and capable of being manipulated or providing interactivity to a user, by	8524.39.40	- - Other: For reproducing representations of instructions, data, sound, and image, recorded in a machine readable binary form, and capable of being manipulated or providing interactivity to a user, by	8524.39.100	- - Other: For reproducing representations of instructions, data, sound, and image, recorded in a machine readable binary form, and capable of being manipulated or providing interactivity to a user, by

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Tariff item (Singapore HS 1996)	Description of products	Tariff item US HS 1996 (US HS 2002)	Description of products	Tariff item (Singapore HS 2002)	Description of products
852440	means of an automatic data processing machine; proprietary format recorded discs - Magnetic tapes for reproducing phenomena other than sound or image.	8524.40	means of an automatic data processing machine; proprietary format recorded discs - Magnetic tapes for reproducing phenomena other than sound or image	8524.40	means of an automatic data processing machine - Magnetic tapes for reproducing phenomena other than sound or image
852491	- Media for reproducing phenomena other than sound or image	8524.91	- For reproducing phenomena other than sound or image	8524.91	- For reproducing phenomena other than sound or image
ex 852499	- - Other: Master records or metal matrices therefrom for use in the production of sound records for export; recordings on wire	8524.99.20	- - Other: Master records or metal matrices therefrom for use in the production of sound records for export; recordings on wire	8524.99.900	- - Other
8525	Transmission apparatus for radiotelephony, radiotelegraphy, radiobroadcasting or television, whether or not incorporating reception apparatus or sound recording or reproducing apparatus; television cameras; still image video cameras or other video camera recorders; digital cameras:	8525	Transmission apparatus for radiotelephony, radiotelegraphy, radiobroadcasting or television, whether or not incorporating reception apparatus or sound recording or reproducing apparatus; television cameras; still image video cameras or other video camera recorders; digital cameras:	8525	Transmission apparatus for radiotelephony, radiotelegraphy, radiobroadcasting or television, whether or not incorporating reception apparatus or sound recording or reproducing apparatus; television cameras; still image video cameras or other video camera recorders; digital cameras
ex 852510	- - Transmission apparatus other than apparatus for radio-broadcasting or television	8525.10.90	- - Transmission apparatus: Other	8525.10.900	- - Transmission apparatus: Other
852520	- Transmission apparatus incorporating reception apparatus	8525.20	- Transmission apparatus incorporating reception apparatus	8525.20	- Transmission apparatus incorporating reception apparatus
ex 852540	- - Digital still image video cameras	8525.40.40	- - Digital still image video cameras	8525.40.100	- - Digital still image video cameras
8527	Reception apparatus for radiotelephony, radiotelegraphy or radiobroadcasting, whether or not combined, in the same housing, with sound recording or reproducing apparatus or a clock:	8527	Reception apparatus for radiotelephony, radiotelegraphy or radiobroadcasting, whether or not combined, in the same housing, with sound recording or reproducing apparatus or a clock:	8527	Reception apparatus for radiotelephony, radiotelegraphy or radiobroadcasting, whether or not combined, in the same housing, with sound recording or reproducing apparatus or a clock
ex 852790	- - Other apparatus: Articles designed	8527.90.40	- - Other apparatus: Articles designed	8527.90.100	- - Other apparatus:

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Tariff item (Singapore HS 1996)	Description of products	Tariff item US HS 1996 (US HS 2002)	Description of products	Tariff item (Singapore HS 2002)	Description of products
ex 852790	for connection to telegraphic or telephonic apparatus or instruments or to telegraphic or telephonic networks		for connection to telegraphic or telephonic apparatus or instruments or to telegraphic or telephonic networks		Portable receivers for calling, alerting or paging and paging alert devices, including pagers
	- - Infant nursery monitor systems, each consisting in the same package of a radio transmitter, an electrical adapter, and a radio receiver	8527.90.50	- - Infant nursery monitor systems, each consisting in the same package of a radio transmitter, an electrical adapter, and a radio receiver.	8527.90.900	- - Other
ex 852790	- - Portable receivers for calling, alerting or paging.	8527.90.90 8531.80.40 8525.20.30 8529.90.23 8529.90.76 8529.90.85 8529.10.60 8531.90.40 8531.90.80	- - Paging alert devices, and part thereof	8527.90.100	- - Other apparatus: Portable receivers for calling, alerting or paging and paging alert devices, including pagers
		(8527.90.86)	(- - Paging receivers)		
8529	Parts suitable for use solely or principally with the apparatus of headings 8525 to 8528:	8529	Parts suitable for use solely or principally with the apparatus of headings 8525 to 8528:	8529	Parts suitable for use solely or principally with the apparatus of headings 8525 to 8528:
ex 852910	- - Aerials or antennae of a kind used with apparatus for radio-telephony and radio-teleggraphy	8529.10.70	- - Antennas and antenna reflectors of a kind used with apparatus for radiotelephony and radioteleggraphy	8529.10.200	- - Aerials and aerial reflectors of with apparatus for radiotelephony and radioteleggraphy.
ex 852990	- - Parts of: transmission apparatus other than apparatus for radio-broadcasting or television transmission apparatus incorporating reception apparatus digital still image video cameras, portable receivers for calling, alerting or paging	8529.90.86	- - Other	8529.90.200	- - Other: transmission apparatus other than apparatus for radio-broadcasting or television transmission apparatus incorporating reception apparatus digital still image video cameras, portable receivers for calling, alerting or paging

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Tariff item (Singapore HS 1996)	Description of products	Tariff item US HS 1996 (US HS 2002)	Description of products	Tariff item (Singapore HS 2002)	Description of products
8531	Electric sound or visual signalling apparatus (for example, bells, sirens, indicator panels, burglar or fire alarms), other than those of heading 8512 or 8530; parts thereof:	8531	Electric sound or visual signalling apparatus (for example, bells, sirens, indicator panels, burglar or fire alarms), other than those of heading 8512 or 8530; parts thereof:	8531	Electric sound or visual signalling apparatus (for example, bells, sirens, indicator panels, burglar or fire alarms), other than those of heading 8512 or 8530; parts thereof:
853120	- Indicator panels incorporating liquid crystal devices (LCD's) or light emitting diodes (LED's)	8471.60.30 8471.60.45 8471.49.15 8471.49.24 8471.49.29 8471.60.10 8473.30.10 8473.30.20 8473.30.50 8531.20.00 8531.80.80 8531.90.40 8531.90.80 8543.89.90 8543.90.55 8543.90.75 9013.80.60 9013.90.40	-- Flat panel display devices (including LCD, Eletro Luminescence, Plasma, Vacuum-Fluorescence and other technologies) for products falling within this agreement, and parts thereof.	8531.20	- Indicator panels incorporating liquid crystal devices (LCD's) or light emitting diodes (LED's)
ex 853190	- - Parts of apparatus of subheading 8531 20	(8531.20) 8531.90.15	- Indicator panels incorporating liquid crystal devices (LCD's) or light emitting diodes (LED's)) - - Parts :printed circuit assemblies: of the panel of subheading 8531.20	8531.90.100	- - Parts of parts including circuit assemblies of subheading 8531.20.000
8532	Electrical capacitors, fixed, variable or adjustable (pre-set); parts thereof:	8532	Electrical capacitors, fixed, variable or adjustable (pre-set); parts thereof:	8532	Electrical capacitors, fixed, variable or adjustable (pre-set)
8533	Electrical resistors (including rheostats and potentiometers), other than heating resistors; parts thereof:	8533	Electrical resistors (including rheostats and potentiometers), other than heating resistors; parts thereof:	8533	Electrical resistors (including rheostats and potentiometers), other than heating resistors
8534	Printed circuits	8534	Printed circuits	8534	Printed circuits

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Tariff item (Singapore HS 1996)	Description of products	Tariff item US HS 1996 (US HS 2002)	Description of products	Tariff item (Singapore HS 2002)	Description of products
8536	Electrical apparatus for switching or protecting electrical circuits, or for making connections to or in electrical circuits (for example, switches, relays, fuses, surge suppressors, plugs, sockets, lamp-holders, junction boxes), for a voltage not exceeding 1000 V:	8536	Electrical apparatus for switching or protecting electrical circuits, or for making connections to or in electrical circuits (for example, switches, relays, fuses, surge suppressors, plugs, sockets, lamp-holders, junction boxes), for a voltage not exceeding 1000 V:	8536	Electrical apparatus for switching or protecting electrical circuits, or for making connections to or in electrical circuits (for example, switches, relays, fuses, surge suppressors, plugs, sockets, lamp-holders, junction boxes), for a voltage not exceeding 1000 V
ex 853650	- - Electronic AC switches consisting of optically coupled input and output circuits (Insulated thyristor AC switches)	8536.50.70	- - Other: - Electronic AC switches consisting of optically coupled input and output circuits (Insulated thyristor AC switches); electronic switches, including temperature protected switches, consisting of a transistor and a logic chip (chip –on – chip technology); electromechanical snap-action switches for a current not exceeding 11 amps	8536.50.200	- - Other switches: Electronic AC switches consisting of optically coupled input and output circuits (Insulated thyristor AC switches)
ex 853650	- - Electronic switches, including temperature protected electronic switches, consisting of a transistor and a logic chip (chip-on-chip technology) for a voltage not exceeding 1000 volts	8536.50.70	- - Other: - Electronic AC switches consisting of optically coupled input and output circuits (Insulated thyristor AC switches); electronic switches, including temperature protected switches, consisting of a transistor and a logic chip (chip –on – chip technology); electromechanical snap-action switches for a current not exceeding 11 amps	8536.50.300	- - Electronic switches, including temperature protected switches, consisting of a transistor and a logic chip (chip –on –chip technology) for a voltage not exceeding 1000 volts.
ex 853650	- -Electromechanical snap-action switches for a current not exceeding	8536.50.70	- - Other: Electronic AC switches consisting of optically coupled input	8536.50.400	- - Electromechanical snap-action switches for a current not exceeding 11

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Tariff item (Singapore HS 1996)	Description of products	Tariff item US HS 1996 (US HS 2002)	Description of products	Tariff item (Singapore HS 2002)	Description of products
	11 amps		and output circuits (insulated thyristor AC switches); electronic switches, including temperature protected switches, consisting of a transistor and a logic chip (chip – on – chip technology); electromechanical snap – action switches for a current not exceeding 11 amps		amps
ex 853669	- - Plugs and sockets for co-axial cables and printed circuits.	8536.69.40	- - Coaxial connectors; cylindrical multicontact connectors; rack and panel connectors; printed circuit connectors; ribbon or flat cable connectors	8536.69.100	- - Sockets and plugs for coaxial cables and printed circuits.
ex 853690	- - Other apparatus: Terminals, electrical splices and electrical couplings; wafer probers	8536.90.40	- - Other apparatus: Terminals, electrical splices and electrical couplings; wafer probers	8536.90.900	- - Other apparatus: Other
ex 853690	- - Wafer probers	8536.90.00 (8536.90.40)	- - Wafer probers (- - Other apparatus: Terminals, electrical splices and electrical couplings; wafer probers)	8536.90.900	- - Other apparatus: Other
8541	Diodes, transistors and similar semiconductor devices; photosensitive semiconductor devices, including photovoltaic cells whether or not assembled in modules or made up into panels; light-emitting diodes; mounted piezoelectric crystals; parts thereof:	8541	Diodes, transistors and similar semiconductor devices; photosensitive semiconductor devices, including photovoltaic cells whether or not assembled in modules or made up into panels; light-emitting diodes; mounted piezoelectric crystals; parts thereof:	8541	Diodes, transistors and similar semiconductor devices; photosensitive semiconductor devices, including photovoltaic cells whether or not assembled in modules or made up into panels; light-emitting diodes; mounted piezoelectric crystals
8542	Electronic integrated circuits and microassemblies; parts thereof:	8542	Electronic integrated circuits and microassemblies; parts thereof:	8542	Electronic integrated circuits and microassemblies
8543	Electrical machines and apparatus, having individual functions, not specified or included elsewhere in this chapter; parts thereof:	8543	Electrical machines and apparatus, having individual functions, not specified or included elsewhere in this chapter; parts thereof:	8543	Electrical machines and apparatus, having individual functions, not specified or included elsewhere in this chapter

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Tariff item (Singapore HS 1996)	Description of products	Tariff item US HS 1996 (US HS 2002)	Description of products	Tariff item (Singapore HS 2002)	Description of products
854311	- Ion implanters designed for doping semiconductor materials	8543.11	- Ion implanters designed for doping semiconductor materials	8543.11	- Ion implanters designed for doping semiconductor materials
ex 854330	- - Machines and apparatus for electroplating, electrolysis or electrophoresis	8543.30.00	- - Machines and apparatus for electroplating, electrolysis or electrophoresis. (2.6%)	8543.30.000	- - Machines and apparatus for electroplating, electrolysis or electrophoresis
854381	- Proximity cards and tags	8543.81	- Proximity cards and tags	8543.81	- Proximity cards and tags
ex 854389	- - Electrical machines with translation or dictionary functions	8543.89.92	- - Electrical machines with translation or dictionary functions; flat panel displays other than for articles of heading 8528	8543.89.100	- - Other:Electrical machines with translation or dictionary functions
ex 854390	- - Parts of apparatus for wet etching, developing, stripping or cleaning semiconductor wafers and flat panel displays	8543.90.10	- - Parts: of physical vapor deposition apparatus	8543.90.100	- - Parts: of ion implanters for doping semiconductor material.
ex 854390	- - Parts of ion implanters of subheading 8543.11	8543.90.64	- - Of ion implanters of subheading 8543.11; of flat panel displays other than for articles of heading 8528	8543.90.100	- - Parts: of ion implanters for doping semiconductor material.
8544	Insulated (including enameled or anodized) wire, cable (including coaxial cable) and other insulated electric conductors, whether or not fitted with connectors; optical fiber cables, made up of individually sheathed fibers, whether or not assembled with electric conductors or fitted with connectors:	8544	Insulated (including enameled or anodized) wire, cable (including coaxial cable) and other insulated electric conductors, whether or not fitted with connectors; optical fiber cables, made up of individually sheathed fibers, whether or not assembled with electric conductors or fitted with connectors:	8544	Insulated (including enameled or anodized) wire, cable (including coaxial cable) and other insulated electric conductors, whether or not fitted with connectors; optical fiber cables, made up of individually sheathed fibers, whether or not assembled with electric conductors or fitted with connectors:
ex 854441	- - Other electric conductors, for a voltage not exceeding 80V, fitted with connectors, of a kind used for telecommunications	8544.41.40	- - Other electric conductors, for a voltage not exceeding 80V, fitted with connectors, of a kind used for telecommunications	8544.41.000	- - Other electric conductors, for a voltage not exceeding 80V, fitted with connectors, of a kind used for telecommunications
ex 854449	- - Other electric conductors, for a	8544.49.40	- - Other electric conductors, for a	8544.49.900	- - Of a kind used for

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Tariff item (Singapore HS 1996)	Description of products	Tariff item US HS 1996 (US HS 2002)	Description of products	Tariff item (Singapore HS 2002)	Description of products
ex 854451	voltage not exceeding 80V, not fitted with connectors, of a kind used for telecommunication - - Other electric conductors, for a voltage exceeding 80V but not exceeding 1000V, fitted with connectors, of a kind used for telecommunications	8544.51.70	voltage not exceeding 80V, not fitted with connectors, of a kind used for telecommunication - - Other electric conductors, for a voltage exceeding 80V but not exceeding 1000V, fitted with connectors; other of a kind used for telecommunication	8544.51.900	telecommunication: Other - - Other electric conductors, for a voltage exceeding 80V but not exceeding 1000V, fitted with connectors; other of a kind used for telecommunication- Other
854470	- Optical fiber cables	8544.70	- Optical fiber cables	8544.70	Optical fiber cables
9009	Photocopying apparatus incorporating an optical system or of the contact type and thermocopying apparatus; parts and accessories thereof:	9009	Photocopying apparatus incorporating an optical system or of the contact type and thermocopying apparatus; parts and accessories thereof:	9009	Photocopying apparatus incorporating an optical system or of the contact type and thermocopying apparatus
900911	- Electrostatic photocopying apparatus, operating by reproducing the original image directly onto the copy (direct process).	9009.11	- Electrostatic photocopying apparatus, operating by reproducing the original image directly onto the copy (direct process)	9009.11	- Electrostatic photocopying apparatus, operating by reproducing the original image directly onto the copy (direct process)
900921	- Other photocopying apparatus, incorporating an optical system	9009.21	- Other photocopying apparatus, incorporating an optical system	9009.21	- Other photocopying apparatus, incorporating an optical system
900990	- Parts and accessories	9009.90	- Parts and accessories	9009.90	- Parts and accessories
9010	Apparatus and equipment for photographic (including cinematographic) laboratories (including apparatus for the projection or drawing of circuit patterns on sensitized semiconductor materials), not specified or included elsewhere in this chapter; negatoscopes; projection screens; parts and accessories thereof:	9010	Apparatus and equipment for photographic (including cinematographic) laboratories (including apparatus for the projection or drawing of circuit patterns on sensitized semiconductor materials), not specified or included elsewhere in this chapter; negatoscopes; projection screens; parts and accessories thereof:	9010	Apparatus and equipment for photographic (including cinematographic) laboratories (including apparatus for the projection or drawing of circuit patterns on sensitized semiconductor materials), not specified or included elsewhere in this chapter; negatoscopes; projection screens

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Tariff item (Singapore HS 1996)	Description of products	Tariff item US HS 1996 (US HS 2002)	Description of products	Tariff item (Singapore HS 2002)	Description of products
901041 to 901049	- Apparatus for the projection or drawing of circuit patterns on sensitized semiconductor materials	9010.41.00 9010.42.00 9010.49.00 ex9010.50.60	- - Apparatus for projection, drawing or plating circuit patterns on sensitized semiconductor materials and flat panel displays.	9010.41to 9010.49	- Apparatus for the projection or drawing of circuit patterns on sensitized semiconductor materials
ex 901090	- - Parts and accessories of the apparatus of Heading No 9010 41 to 9010 49	(9010.41 to 9010.49) 9010.90.70	(- Apparatus for the projection or drawing of circuit patterns on sensitized semiconductor materials.) - - Other: of apparatus of subheadings 9010.41 to 9010.49; of apparatus of subheading 9010.50.60 for the projection or drawing of circuit patterns on flat panel displays.	9010.90.100	- - Parts and accessories of the apparatus of subheadings 9010.41.000,9010.42.000 and 9010.49.000
9011 ex 901110	Compound optical microscopes, including those for photomicrography, cinemicrography or microprojection; parts and accessories thereof: - - Stereoscopic microscopes: provided with a means for photographing the image	9011 9031.41.00 (9011.10.40)	Compound optical microscopes, including those for photomicrography, cinemicrography or microprojection; parts and accessories thereof: - - Optical stereoscopic microscopes fitted with equipment specifically designed for the handling and transport of semiconductor wafers or recticles. (- - Stereoscopic microscopes :provided with a means for photographing the image. (3.9%))	9011 9011.10.000	Compound optical microscopes, including those for photomicrography, cinemicrography or microprojection - - Stereoscopic microscopes

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Tariff item (Singapore HS 1996)	Description of products	Tariff item US HS 1996 (US HS 2002)	Description of products	Tariff item (Singapore HS 2002)	Description of products
ex 901120	- - Other microscopes, for photomicrography, cinemicrography or microprojection: provided with a means for photographing the image	9031.41.00 (9011.20.40)	- - Photomicrographic microscopes fitted with equipment specifically designed for the handling and transport of semiconductor wafers or recticles. (- - Other microscopes, for photomicrography, cinemicrography or microprojection: provided with a means for photographing the image. (3.9%))	9011.20.000	- - Other microscopes, for photomicrography, cinemicrography or microprojection
ex 901190	- - Parts and accessories	9031.90.55 (9011.90.00)	- - Parts and accessories of optical stereoscopic microscopes fitted with equipment specifically designed for the handling and transport of semiconductor wafers or recticles. (- - Parts and accessories. (5.7%))	9011.90.000	- - Parts and accessories
ex 901190	- - Parts and accessories	9031.90.55 (9011.90.00)	- - - Parts and accessories of photomicrographic microscopes fitted with equipment specifically designed for the handling and transport of semiconductor wafers or recticles. (- - Parts and accessories. (5.7%))	9011.90.000	- - Parts and accessories
9012	Microscopes other than optical microscopes; diffraction apparatus; parts and accessories thereof:	9012	Microscopes other than optical microscopes; diffraction apparatus; parts and accessories thereof:	9012	Microscopes other than optical microscopes; diffraction apparatus
ex 901210	- - Microscopes other than optical microscopes; diffraction apparatus	9031.80.00	- - Electron beam microscopes fitted with equipment specifically designed for the handling and	9012.10.000	- - Microscopes other than optical microscopes; diffraction apparatus

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Tariff item (Singapore HS 1996)	Description of products	Tariff item US HS 1996 (US HS 2002)	Description of products	Tariff item (Singapore HS 2002)	Description of products
ex 901290	- - Parts and accessories	(9012.10.00) 9031.90.60 (9012.90.00)	transport of semiconductor wafers or recticles. (- - Microscopes other than optical microscopes; diffraction apparatus. (3.5%)) - - Parts and accessories of electron beam microscopes fitted with equipment specifically designed for the handling and transport of semiconductor wafers or recticles. (- - Parts and accessories. (4.9%))	9012.90.000	- - Parts and accessories
9017 ex 901720	Drawing, marking-out or mathematical calculating instruments (for example, drafting machines, pantographs, protractors, drawing sets, slide rules, disc calculators); instruments for measuring length, for use in the hand (for example, measuring rods and tapes, micrometers, calipers), not specified or included elsewhere in this chapter; parts and accessories thereof: - - Pattern generating apparatus designed to produce masks and reticles from photoresist coated substrates (such as optical, e-beam, focused ion beam, x-ray or laser beam apparatus except those of subheading 8456.99.10)	9017 9017.20.50 (9017.20.50)	Drawing, marking-out or mathematical calculating instruments (for example, drafting machines, pantographs, protractors, drawing sets, slide rules, disc calculators); instruments for measuring length, for use in the hand (for example, measuring rods and tapes, micrometers, calipers), not specified or included elsewhere in this chapter; parts and accessories thereof: - - Pattern generating apparatus of a kind for producing masks or recticles from photoresist coated substrates (- - Pattern generating apparatus designed to produce masks and reticles from photoresist coated substrates (such as optical, e-beam, focused ion beam, x-ray or laser beam apparatus except those of subheading 8456.99.10))	9017.20.000	Drawing, marking-out or mathematical calculating instruments (for example, drafting machines, pantographs, protractors, drawing sets, slide rules, disc calculators); instruments for measuring length, for use in the hand (for example, measuring rods and tapes, micrometers, calipers), not specified or included elsewhere in this chapter - - Other drawing, marking out or mathematical calculating instruments.
ex 901790	- - Parts and accessories	9017.90.00	- - Parts and accessories for pattern generating apparatus of a kind	9017.90.000	- - Parts and accessories

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Tariff item (Singapore HS 1996)	Description of products	Tariff item US HS 1996 (US HS 2002)	Description of products	Tariff item (Singapore HS 2002)	Description of products
ex 901790	- - Parts and accessories	(9017.90.00) 9017.90.00 (9017.90.00)	used for producing masks or reticles from photoresist coated substrates (- - Parts and accessories (The rate applicable to the article of which it is part or accessory)) - - Parts of such pattern generating apparatus. (- - Parts and accessories(The rate applicable to the article of which it is part or accessory))	9017.90.000	- - Parts and accessories
9018		9018	Instruments and appliances used in medical, surgical, dental or veterinary sciences, including scintigraphic apparatus, other electro-medical apparatus and sight-testing instruments; parts and accessories thereof: - Electro-diagnostic apparatus (including apparatus for functional exploratory examination or for checking physiological parameters); parts and accessories thereof:	9018	Instruments and appliances used in medical, surgical, dental or veterinary sciences, including scintigraphic apparatus, other electro-medical apparatus and sight-testing instruments. - Electro-diagnostic apparatus (including apparatus for functional exploratory examination or for checking physiological parameters); parts and accessories thereof:
9019		9019	Mechano-therapy appliances; massage apparatus; psychological aptitude-testing apparatus; ozone therapy, oxygen therapy, aerosol therapy, artificial respiration or other therapeutic respiration apparatus; parts and accessories thereof:	9019	Mechano-therapy appliances; massage apparatus; psychological aptitude-testing apparatus; ozone therapy, oxygen therapy, aerosol therapy, artificial respiration or other therapeutic respiration apparatus
9021		9021	Orthopedic appliances, including crutches, surgical belts and trusses; splints and other fracture appliances; artificial parts of the body; hearing aids and other appliances which are worn or carried, or implanted in the body, to compensate for a defect or disability; parts and accessories thereof:	9021	Orthopedic appliances, including crutches, surgical belts and trusses; splints and other fracture appliances; artificial parts of the body; hearing aids and other appliances which are worn or carried, or implanted in the body, to compensate for a defect or disability

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Tariff item (Singapore HS 1996)	Description of products	Tariff item US HS 1996 (US HS 2002)	Description of products	Tariff item (Singapore HS 2002)	Description of products
9026	Instruments and apparatus for measuring or checking the flow, level, or other variables of liquids or gases (for example, flow meters, level gauges, manometers, heat meters), excluding instruments and apparatus of heading 9014, 9015, 9028 or 9032; parts and accessories thereof:	9026	Instruments and apparatus for measuring or checking the flow, level, or other variables of liquids or gases (for example, flow meters, level gauges, manometers, heat meters), excluding instruments and apparatus of heading 9014, 9015, 9028 or 9032; parts and accessories thereof:	9026	Instruments and apparatus for measuring or checking the flow, level, or other variables of liquids or gases (for example, flow meters, level gauges, manometers, heat meters), excluding instruments and apparatus of heading 9014, 9015, 9028 or 9032
9027	Instruments and apparatus for physical or chemical analysis (for example, polarimeters, refractometers, spectrometers, gas or smoke analysis apparatus); instruments and apparatus for measuring or checking viscosity, porosity, expansion, surface tension or the like; instruments and apparatus for measuring or checking quantities of heat, sound or light (including exposure meters); microtomes; parts and accessories thereof:	9027	Instruments and apparatus for physical or chemical analysis (for example, polarimeters, refractometers, spectrometers, gas or smoke analysis apparatus); instruments and apparatus for measuring or checking viscosity, porosity, expansion, surface tension or the like; instruments and apparatus for measuring or checking quantities of heat, sound or light (including exposure meters); microtomes; parts and accessories thereof:	9027	Instruments and apparatus for physical or chemical analysis (for example, polarimeters, refractometers, spectrometers, gas or smoke analysis apparatus); instruments and apparatus for measuring or checking viscosity, porosity, expansion, surface tension or the like; instruments and apparatus for measuring or checking quantities of heat, sound or light (including exposure meters); microtomes
902720	- Chromatographs and electrophoresis instruments	9027.20	- Chromatographs and electrophoresis instruments	9027.20	- Chromatographs and electrophoresis instruments
902730	- Spectrometers, spectrophotometers and spectrographs using optical radiations (UV, visible, IR)	9027.30	- Spectrometers, spectrophotometers and spectrographs using optical radiations (UV, visible, IR)	9027.30	- Spectrometers, spectrophotometers and spectrographs using optical radiations (UV, visible, IR)
902750	- Other instruments and apparatus using optical radiations (UV, visible, IR)	9027.50	- Other instruments and apparatus using optical	9027.50	- Other instruments and apparatus using optical radiations (UV, visible, IR)
902780	- Other instruments and apparatus	9027.80	- Other instruments and apparatus	9027.80	- Other instruments and apparatus
ex 902790	- - Parts and accessories of products of heading 9027, other than for gas or smoke analysis apparatus and microtomes.	9027.90.45	- - Parts and accessories: of electrical instruments and apparatus: printed circuit assemblies for the goods of subheading 9027.80.	9027.90.100	- - Parts and accessories including printed circuit assemblies of products of heading 9027, other than for gas or smoke analysis apparatus and microtomes.

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Tariff item (Singapore HS 1996)	Description of products	Tariff item US HS 1996 (US HS 2002)	Description of products	Tariff item (Singapore HS 2002)	Description of products
		9027.90.54	- - Other: of instruments and apparatus of subheading 9027.20, 9027.30, 9027.40, 9027.50, or 9027.80		
		9027.90.64	- - Other: of optical instruments and apparatus: of instruments and apparatus of subheading 9027.20, 9027.30, 9027.40, 9027.50 or 9027.80.		
9030	Oscilloscopes, spectrum analyzers and other instruments and apparatus for measuring or checking electrical quantities, excluding meters of heading 9028; instruments and apparatus for measuring or detecting alpha, beta, gamma, x-ray, cosmic or other ionizing radiations; parts and accessories thereof:	9030	Oscilloscopes, spectrum analyzers and other instruments and apparatus for measuring or checking electrical quantities, excluding meters of heading 9028; instruments and apparatus for measuring or detecting alpha, beta, gamma, x-ray, cosmic or other ionizing radiations; parts and accessories thereof:	9030	Oscilloscopes, spectrum analyzers and other instruments and apparatus for measuring or checking electrical quantities, excluding meters of heading 9028; instruments and apparatus for measuring or detecting alpha, beta, gamma, x-ray, cosmic or other ionizing radiations
903040	- Other instruments and apparatus, specially designed for telecommunications (for example, cross-talk meters, gain measuring instruments, distortion factor meters, psophometers)	9030.40	- Other instruments and apparatus, specially designed for telecommunications (for example, cross-talk meters, gain measuring instruments, distortion factor meters, psophometers)	9030.40	- Other instruments and apparatus, specially designed for telecommunications (for example, cross-talk meters, gain measuring instruments, distortion factor meters, psophometers)
903082	- Instruments and apparatus for measuring or checking semiconductor wafers or devices	9030.82	- Other Instruments and apparatus for measuring or checking semiconductor wafers or devices	9030.82	- Other Instruments and apparatus for measuring or checking semiconductor wafers or devices
ex 903090	- - Parts and accessories of instruments and apparatus of subheading 9030.82	9030.90.64	- - Parts and accessories of instruments and apparatus of subheading 9030.82	9030.90.100	- - Parts and accessories: of instruments and apparatus for measuring or checking semiconductor wafers or devices
ex 903090	- - Parts of instruments and appliances for measuring or checking semiconductor wafers or devices	9030.90.84	- - Parts and accessories: instruments and apparatus of subheading 9030.82.	9030.90.100	- - Parts of instruments and apparatus for measuring or checking semiconductor wafers or devices

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Tariff item (Singapore HS 1996)	Description of products	Tariff item US HS 1996 (US HS 2002)	Description of products	Tariff item (Singapore HS 2002)	Description of products
9031	Measuring or checking instruments, appliances and machines, not specified or included elsewhere in this chapter; profile projectors; parts and accessories thereof:	9031	Measuring or checking instruments, appliances and machines, not specified or included elsewhere in this chapter; profile projectors; parts and accessories thereof:	9031	Measuring or checking instruments, appliances and machines, not specified or included elsewhere in this chapter; profile projectors
903141	- Optical instruments and appliances for inspecting semiconductor wafers or devices or for inspecting masks, photomasks or reticles used in manufacturing semiconductor devices	9031.41.00 9031.49.80	- Optical instruments and appliances for inspecting semiconductor wafers or devices or for inspecting masks, photomasks or reticles used in manufacturing semiconductor devices	9031.41	- Other optical instruments and appliances for inspecting semiconductor wafers or devices or for inspecting masks, photomasks or reticles used in manufacturing semiconductor devices
		(9031.41)	(- Other optical instruments and appliances for inspecting semiconductor wafers or devices or for inspecting masks, photomasks or reticles used in manufacturing semiconductor devices)		
ex 903149	- - Optical instruments and appliances for measuring surface particulate contamination on semiconductor wafers	9031.49.70	- - For inspecting masks (other than photomasks) used in manufacturing semiconductor devices; for measuring surface particulate contamination on semiconductor devices.	9031.49.100	- - Optical instruments and appliances for measuring surface particulate contamination on semiconductor wafers
ex 903190	- - Parts and accessories of optical instruments and appliances of subheading 9031.41 or 9031.49.70	9031.90.54	- - Parts and accessories of optical instruments and appliances of subheading 9031.41 or 9031.49.70	9031.90.100	- - Parts and accessories including printed circuit assemblies of optical instrument and appliances for inspecting semiconductor wafers or devices or for inspecting masks, photomasks or reticles used in manufacturing semiconductor devices.
ex 903190	- - Parts and accessories of optical instruments and appliances of subheading 9031.41 or 9031.49.70	9031.90.54	- - Parts and accessories of optical instruments and appliances of subheading 9031.41 or 9031.49.70	9031.90.200	- - Parts and accessories including printed circuit assemblies of optical instruments and appliances for measuring surface particulate contamination on semiconductor wafers.

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Notations in the US column:

Blue bold: items in the US 1997 ITA list which can be matched by description to the Singapore ITA list
(black bracket): 2002 HS code and descriptions of items in the US 1997 ITA list
black normal: items in the Singapore ITA list which cannot be matched to the US 1997 ITA list